

What is claimed is:

1. A godet roll for guiding, heating and conveying yarn, the godet roll comprising a projecting support, a drivable hollow-cylindrical godet roll casing forming a circumferential yarn guiding surface, at least one radially acting bearing rotatably seating the godet roll casing on the projecting support in at least one bearing plane, the radially acting bearing comprising a plurality of bearing pole windings, and a heating device comprising a plurality of heating pole windings on the support, the bearing pole windings and the heating pole windings being arranged within an annular chamber between the support and the godet roll casing, at least one of the heating pole windings being arranged in the bearing plane between the bearing pole windings of the bearing plane.

2. The godet roll in accordance with claim 1, characterized in that the bearing pole windings of the magnetic bearings are arranged in at least three bearing planes, and at least some of the heating pole windings are arranged in the bearing planes between the bearing pole windings.

3. The godet roll in accordance with claim 1, characterized in that one or both of the heating pole windings and the bearing pole windings are arranged on the support at angular offsets from bearing plane to bearing plane.

4. The godet roll in accordance with claim 3, characterized in that one or both of the heating pole windings and the bearing pole windings are in a spiral-shaped arrangement in the longitudinal direction of the support.

5. The godet roll in accordance with claim 1, characterized in that one or both of the heating pole windings and the bearing pole windings are arranged in overlapping relation in the circumferential direction of the support.

6. The godet roll in accordance with claim 1, characterized in that a plurality of sensors are provided outside the annular chamber for determining the position of the godet roll casing and are connected with a control device for controlling the bearing pole windings.

7. A godet roll for guiding, heating and conveying yarn, the godet roll comprising a projecting support, a drivable hollow-cylindrical godet roll casing forming a circumferential yarn guiding surface, at least one radially acting bearing rotatably seating the godet roll casing on the projecting support in at least one bearing plane, the radially acting bearing comprising a plurality of bearing pole windings, a heating device comprising a plurality of heating pole windings on the support, the bearing pole windings and the heating pole windings being arranged within an annular chamber between the support and the godet roll casing, a plurality of sensors provided outside

10061510-020102

